

WHAT IS CLAIMED IS:

1. A passenger air bag system for vehicles, comprising:
an air bag housing mounted to an instrument panel at the
5 front part thereof;

an inflator mounted in the air bag housing for
discharging gas when a collision of the vehicle occurs;

a cushion accommodated in the air bag housing such that
the cushion is expanded to the front of a passenger seated in
10 a passenger seat by means of the gas discharged from the
inflator;

a retainer attached to the air bag housing for
supporting the cushion; and

a diffuser bag fixed to an inlet part of the cushion
15 while the diffuser bag communicates with the inlet part of the
cushion, the diffuser bag having openings formed at both sides
thereof for changing the flow direction of the gas introduced
into the cushion.

20 2. The system as set forth in claim 1, wherein the
diffuser bag comprises:

a main body formed in the shape of a pocket for
receiving gas;

an inlet part formed at the main body while the inlet
25 part of the diffuser bag communicates with the inlet part of

the cushion; and

a gas-discharging opening formed at one side of the main body for discharging gas received in the main body in a prescribed direction.

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3. The system as set forth in claim 2, wherein the main body of the diffuser bag comprises:

an upper panel forming the upper part of the main body;
and

10 a lower panel attached to the lower side of the upper panel by means of sewing for defining a chamber therein together with the upper panel.

4. The system as set forth in claim 3, wherein the upper
15 panel and the lower panel are sewn to each other at their outer edges.

5. The system as set forth in claim 4, wherein the upper panel and the lower panel are made of a fibrous material.

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6. The system as set forth in claim 5, wherein the main body of the diffuser bag has a gas-discharging hole for allowing the gas introduced into the main body through the inlet part of the diffuser bag to be discharged to the cushion
25 therethrough.

7. The system as set forth in claim 6, wherein the upper panel has a gas-discharging hole formed therein, and the lower panel has another gas-discharging hole formed therein, the gas-discharging hole of the upper panel corresponding to the gas-discharging hole of the lower panel.

8. The system as set forth in claim 7, wherein the gas-discharging holes are formed in large numbers at the upper panel and the lower panel.

9. The system as set forth in claim 8, wherein the inlet part of the diffuser bag is defined between one end of the upper panel attached to the upper side of the inlet part of the cushion and one end of the lower panel attached to the lower side of the inlet part of the cushion.

10. The system as set forth in claim 9, wherein the upper panel and the lower panel are separated from each other at both sides of the upper and lower panels adjacent to one end of the main body of the diffuser bag.

11. The system as set forth in claim 10, wherein the ends of the upper panel and the lower panel are attached to the inlet part of the cushion by means of sewing.

12. The system as set forth in claim 11, wherein the gas-discharging opening is formed at the main body of the diffuser bag for discharging gas in a direction opposite to the direction of eccentric expansion of the cushion by means of the gas.

13. The system as set forth in claim 12, wherein the gas-discharging opening is formed by cutting the sewn outer edges of the upper and lower panels.

14. The system as set forth in claim 13, wherein the main body of the diffuser bag is provided with a pressure-releasing opening for preventing increase of the pressure inside the main body above a prescribed limit.

15. The system as set forth in claim 14, wherein the pressure-releasing opening is formed at the edge of the main body of the diffuser bag.

16. The system as set forth in claim 15, wherein the pressure-releasing opening is formed by not sewing the upper panel and the lower panel.